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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/975,991 | 10/15/2001 | Neil John Hursey | NA11P486/01.060.01 | 9572 |

28875 7590 01/29/2007
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EXAMINER

TO, BAOTRAN N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2135

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 01/29/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/975,991 | Applicant(s) HURSEY ET AL. | |
| | Examiner Bao Tran N. To | Art Unit 2135 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is responsive to the Appeal Brief filed 10/20/2006.
Claims 1-27 remain for examination.

Response to Arguments

2. An appeal conference has met and fully considered applicants' remarks in the Appeal Brief. The Conferees agreed with the applicants on the argument on the page 10-19. However, a newly found prior art has brought the pending claims 1-27 to the rejection below. Examiner provides a new ground of rejection below for claims 1-27.

Reopening of Prosecution - New Ground of Rejection After Appeal or Examiner's Rebuttal of Reply Brief In view of the Appeal Brief filed on 10/20/06, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options: (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or, (2) request reinstatement of the appeal. If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Objections

3. Claims 1, 9 and 17 are objected to because of the following informalities: the limitation "scanning code operable as a **low priority task** within a multitasking environment" in lines 6-7 of Claims 1, 9 and 17. This is insufficient for this limitation in claim. It is unclear what Applicant's intended metes and bounds of the claim. Applicant is needed to clarify this limitation to distinguish from the prior arts. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-8 and 25-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 is directed to "A computer program product for controlling operation...." Applicant intends to cover signals or waves (note Specification, page 8, lines 30-32). A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result. Therefore, A computer program product of Claim 1 is directed to non-statutory subject matter.

Claims 2-8 and 25-27 are also rejected because of dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Caronni et al. (U.S. Patent Application Publication 2002/0143850 A1) hereinafter Caronni.

Referring to Claims 1, 9 and 17, Caronni discloses a computer program product for controlling operation of a computer to detect malware, said computer program product comprising:

pending scan database code operable to maintain a pending scan database **(the progress indicator is linked to a data resource 240. Example of data resources comprise databases (e.g. relational database), flat files, a hash table and any data storage media) (Figure 2, element 240 and paragraph 0029)** storing data identifying computer files that have been written to a data storage device (Figure 4, element 412) and for which a scan for malware has yet to be performed **(Processor 413 may execute the received code as it is received and/stored in mass storage 412) (paragraph 0057) (a system for scanning incoming data for viruses. The system**

comprises one or more processing nodes that have access to a library of virus signature (data source) (Figures 2-4, and paragraph 0029); and

scanning code operable as a low priority task within a multitasking environment
(a data processing node may run low on memory due to high volume of incoming data. In this example, the processing node may be configured to suspend virus scanning and reroute the processing to a different processing node with available resource) (paragraphs 0030), (Once the processing is complete, the device is tasked with other higher priority jobs, or the device elects to stop processing prior to completely processing the packet data) (paragraph 0035) to conduct malware scanning upon computer files identified within said pending scan database storing data identifying computer files (files) that haven been written to said data storage device and for which the scan for malware has yet to be performed **(a system for scanning incoming data for viruses. The system comprises one or more processing nodes that have access to a library of virus signature (data source). Such a library may be stored in the relational database, flat file, hash table or obtained from a server. Each node is enabled to access the virus signature library and scan the data the presence of any of the virus signatures. In this example, the progress indicator contains a reference or a pointer to the virus signature being scanned) (Figures 2-4, paragraph 0029-0030 and 0035).**

Referring to Claims 2, 10 and 18, Caronni discloses the limitations as discussed in Claims 1, 9 and 17 above. Caronni further discloses file write code operable as a

computer file is written to a storage device to add data identifying said computer file to said pending scan database (paragraph 0030).

Referring to Claims 3, 11 and 19, Caronni discloses the limitations as discussed in Claims 1, 9 and 17 above. Caronni further discloses file read code operable in response to a read request for a computer file included within said pending scan database to trigger said scanning code to scan said computer file as a high priority task before permitting read access to said computer file (paragraph 0035).

Referring to Claims 4, 12 and 20, Caronni discloses the limitations as discussed in Claims 1, 9 and 17 above. Caronni further discloses scanned file database code operable to maintain a scanned file database storing data identifying computer files that have been scanned for malware (paragraph 0029).

Referring to Claims 5, 13 and 21, Caronni discloses the limitations as discussed in Claim 4 above. Caronni further discloses wherein said data identifying computer files that have been scanned for malware includes checksum data derived from said computer files that were scanned (paragraph 0049).

Referring to Claims 6, 14 and 22, Caronni discloses the limitations as discussed in Claim 5 above, Caronni further discloses file read code operable in response to a read request for a computer file to detected if said computer file is within said scanned

file database and a checksum value recalculated for said computer file matches that stored within said scanned file database before permitting said read request (paragraph 0045 and 0049).

Referring to Claims 7, 15 and 23, Caronni discloses the limitations as discussed in Claim 4 above, Caronni further discloses initiation code operable upon startup to detect any computer files stored on a storage device not included within either said pending scan database or said scanned file database and to add such computer files to said pending scan database (paragraph 0029-0030).

Referring to Claims 8, 16 and 24, Caronni discloses the limitations as discussed in Claim 1 above, Caronni further discloses wherein said malware comprises one or more of: (i) a computer file infected with a computer virus; (ii) a Trojan; (iii) a banned computer file; and (iv) a computer file containing banned content (paragraph 0029).

Referring to Claim 25, Caronni discloses the limitations as discussed in Claim 1 above, Caronni further discloses wherein an order of said computer files identified within said pending scan database being scanned is based on an algorithm that estimates the likelihood of a read request being performed on each computer file (paragraph 0044-0045).

Referring to Claim 26, Caronni discloses the limitations as discussed in Claim 4 above, Caronni further discloses wherein only computer files determined to be clean from malware scanning are stored in the scanned file database (paragraph 0009 and 0030).

Referring to Claim 27, Caronni discloses the limitations as discussed in Claim 1 above, Caronni further discloses wherein an order of said computer files identified within said pending database being scanned is based on the order in which said computer files were placed in said pending scan database (paragraph 0029, 0030 and 0035).

Contact Information

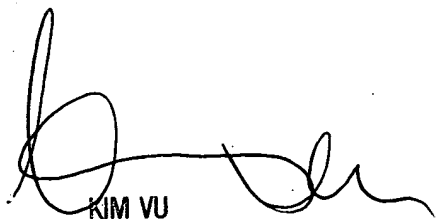
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Tran N. To whose telephone number is 571-272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BT
01/16/2007



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